

Kim DelNigro

From: Roland Bartl
Sent: Tuesday, April 18, 2006 9:37 AM
To: Planning Board; Kim DelNigro; 'Authentic Homes Inc'; Doug Halley; Robert Craig
Subject: FW: Ellsworth blastin



MEMO TO.doc (23
KB)

FYI - memo I received this morning.

Jim: The allegation appears to be that your blasting contractor might have used blasting materials that were "contaminated" with perchlorates, and that therefore you should be responsible for the pre-blast test expenses. As I mentioned before, you should probably produce to the Planning Board the certifications that perchlorate-free compounds were used.

Kim - please add this to the package for the 4/25 PlB meeting.

Roland Bartl, AICP
Town Planner, Town of Acton
472 Main Street
Acton, MA 01720
978-264-9636

-----Original Message-----

From: Carol Holley
Sent: Tuesday, April 18, 2006 8:36 AM
To: Roland Bartl
Subject: Ellsworth blastin

I think the attached memo has as much information as the Planning Board would want. Owners of both contaminated wells seemed ok with it. My understanding is that the Planning Board's condition covered test costs only, so that's what I limited this memo to.

See you next Tuesday,
carol

MEMO TO: Acton Planning Board

FROM: Carol Holley

DATE: April 17, 2006

RE: Ellsworth Village, Blasting, and Perchlorate

The Acton Planning Department is to be commended for its awareness and proactiveness in dealing with perchlorate, particularly by issuing the following condition to the Ellsworth Village Special Permit:

“3.2.2 If perchlorate compounds will be used in the blasting process, the Applicant shall offer all immediate abutters of the Site, and, in the event that blasting is required on Brabrook, Flagg, and Pope Roads, all residents on Brabrook and Flagg Roads and residents abutting the blasting location on Pope Road, a pre-blasting screening of their domestic well water for ammonium perchlorate and other perchlorate compounds. Prior to conducting the blasting, the Applicant shall pay each such abutter or resident who agreed to a pre-blasting test, the cost of a post-blasting test which they may conduct at the time of their choosing. The post-blasting payment is waived for any abutter who ties into the newly installed water main.”

However, this condition was not met.

I spoke with Rosemary Knox of the Massachusetts DEP last September regarding perchlorate and blasting. She informed me that even if perchlorate is not listed on the Material Safety Data Sheet (MSDS) for blasting products, certain products contained perchlorate as a contaminant. This raised enough concern in the neighborhood that nine individuals performed pre-blast testing, using a DEP-certified lab and DEP-approved testing procedures. All nine wells in the pre-blast testing round showed non-detect for perchlorate. This sampling was done last September 26.

A post-blasting sampling round was performed on March 6. One Brabrook Road well came back with a perchlorate level of over 1 ppb. This result caused other residents of Brabrook Road to test their wells, and the well with a perchlorate hit was resampled for confirmation; this testing occurred on March 29. The resampled well showed results of 2.43 ppb at this time and the well next door, previously unsampled, showed results of 5.36 ppb – both over the proposed DEP Maximum Contaminant Level (MCL) of 2 ppb. Consultation with a hydrogeologist and Licensed Site Professional (LSP) indicated that the geographic distribution of the first testing would “cover” the previously unsampled well; this opinion was later confirmed by conversation with a second LSP.

Further investigation, including a review of the Acton Fire Department file, yielded information that the blasting compound known to be contaminated with perchlorate, MSDS #1019, was indeed used at this site. The DEP published a draft report, “The Occurrence and Sources of Perchlorate in Massachusetts”, in August of 2005, containing this information. Blasting caps containing perchlorate were also used, although the DEP indicates that these are not significant contributors to groundwater contamination.

Perchlorate has been shown to have neuropsychological development effects in fetuses, nursing infants, and children under 12 (see "Update to 'Perchlorate Toxicological Profile and Health Assessment'", Mass. DEP, March 2006, available at the DEP website). Studies have tracked effects after 2-week exposures. The actual exposure length of the two families involved is unknown, however, it is certainly more than two weeks, and more than two weeks will probably pass before the water main, should they choose to hook into it, will be available.

Therefore, it seems appropriate that the families that participated in the testing rounds, in accordance with the provisions of the special permit as noted above, be reimbursed. Other actions may be taken outside the purview of the Planning Board. The total cost to all families involved, at \$127.50/sample, exceeds \$3,000. Copies of Alpha Analytical invoices are available upon request.